Summary Report

Program Management Reporting Using Electronic Data Interchange

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Introduction

The Department of Defense (DoD) and the federal government are rapidly migrating to an electronic commerce (EC) environment to exchange a complete range of business, management, and technical information. DoD is committed to the use of electronic commerce tools such as electronic data interchange (EDI) to improve the quality and timeliness of data exchange, establish consistent methods, streamline processes and procedures, and reduce costs while increasing the effectiveness of personnel and information.

EDI has many features that can benefit the program management environment. Timely and accurate data exchange is essential for effective program management and control. Contractors and their customers need to be able to quickly and reliably exchange critical cost, schedule, and technical information to adequately manage a program.

EDI provides a standard format that allows contractors and their customers to exchange business and program management data electronically using an application neutral format. EDI eliminates time delays and manual data entry, increasing the accuracy and usefulness of the data. At the same time, the standard format enhances data consistency and reduces the cost of collecting the data because application specific requirements and interfaces are eliminated. The end result is better use of data and analysis systems, enhanced visibility of problems and their solutions, and improved communication between the contractor and their customer.

Background

History

The American National Standards Institute (ANSI) Accredited Standards Committee (ASC) X12 EDI transaction sets used to exchange program management data were developed in 1989, 1990, and 1991. This included the:

- 196 Contractor Cost Data Reporting transaction set;
- 806 Project Schedule Reporting transaction set;
- 839 Project Cost Reporting transaction set.

The aerospace and defense industries were the original sponsors of these transaction sets. Their intent was to eliminate or reduce the numerous methods government program offices used to request or require the delivery of program management data; typically either on paper or using an application specific data format sent via floppy disk. The two main industry associations involved in the initial development were the Aerospace Industries Association (AIA) and the National Security Industry Association

(NSIA), which is now known as the National Defense Industrial Association (NDIA).

At the same time these transaction sets were under development, the then NSIA Management Systems Subcommittee was working with the Office of the Under Secretary of Defense for Acquisition and Technology, Performance Management, to update DoD policy to embrace the use of the ANSI X12 standards and electronic data interchange. This resulted in a policy memorandum issued in April 1991 by the DoD Performance Measurement Joint Executive Group (PMJEG), the then governing DoD body for performance management reporting. This memorandum stressed that program offices should use the X12 EDI standards to exchange cost and schedule data.

The Department of the Navy (DoN) was the first government user to implement EDI for cost performance reporting (CPR) and contractor cost data reporting (CCDR) using the industry development transaction sets.

The Naval Sea Systems Command (NAVSEA) began prototype implementations of the 839 transaction set in 1992 and produced a draft DoD implementation convention (IC) for the 839. The Naval Air Systems Command (NAVAIR) began prototype implementations of the 196 transaction set in 1993 and produced a draft IC for the 196 in conjunction with the Office of the Secretary of Defense (OSD) Program Analysis and Evaluation (PA&E). NAVAIR also began the effort to exchange 806 transaction set data in 1994 and produced a draft DoD IC for the 806. The DoN provided the services of their EDI servers to exchange data with the end users and contractors as part of the prototype process.

As a direct result of the Navy's efforts and successful prototype implementations, the Office of the Deputy Under Secretary of Defense, Acquisition Reform, provided funds in fiscal year 1995 and 1996 to expand and extend the use of EDI for program management reporting across all the services.

As an outgrowth of the Navy's efforts and OSD funding, a DoD Program Management EDI Working Group was established in August, 1995 for the purpose of helping program offices implement EDI for program management reporting.

The Office of the Under Secretary of Defense, Acquisition and Technology, Performance Management also played a key support role. This office

updated the performance reporting data item descriptions (DIDs)¹ to include wording about the use of EDI standards. They also issued policy memorandums² in 1995 and 1996 stressing that all new contracts should use EDI for program management reporting and all existing contracts should be evaluated to determine if it would be cost effective to migrate to electronic methods of data delivery.

Using the remaining funding from OSD, the effort to expand and extend the use of EDI for program management reporting continued through the end of fiscal year 1998 with NAVSEA functioning as the focal point with support from the DoN Electronic Commerce Program Office.

The Office of the Secretary of Defense, Program Analysis and Evaluation (OSD PA&E) also initiated a number of activities to improve the contractor cost data reporting process in conjunction with the aerospace and defense community. This included rewriting the CCDR handbook, working to establish a central CCDR repository, and developing a migration plan with March 31, 1998 set as the date when all CCDR data would be sent and received using the 196 transaction set.

The DoD Program Management EDI Working Group was disbanded in August, 1997 after the Under Secretary of Defense Acquisition and Technology Integrated Program Management Initiative Executive Steering Group (IPMI ESG) for the Integrated Digital Environment (IDE) was formed in July, 1997. The Navy has continued to interface with the IDE working group on a regular basis on matters related to EDI in the program management environment.

Working with the joint federal and DoD Logistics Functional Working Group (LFWG), the draft ICs developed by the Navy were approved as federal implementation conventions in July, 1997 based on the ANSI X12 version/release 003050 (196 and 839) and 003060 (806). The program management ICs were subsequently updated in 1998 to the ANSI X12

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¹ DID DI-MGMT-81466, Cost Performance Report (CPR), 19 October 1995; DID DI-MGMT-81467, Cost/Schedule Status Report (C/SSR), 19 October 1995; and DID DI-MGMT-81468, Contract Funds Status Report (CFSR), 19 October 1995.

² Memorandum for Component Acquisition Executives, from Paul G. Kaminski, Under Secretary of Defense for Acquisition and Technology, *Electronic Data Interchange (EDI) and Contract Cost Performance Reporting*, 25 January 1995; Memorandum for Service Acquisition Executives, from Paul G. Kaminski, Under Secretary of Defense for Acquisition and Technology, *Contractor Cost Data Report (CCDR) Policy Memorandum*, 16 January 1996; and Memorandum for Secretaries of the Military Departments, et al., from R. Noel Longuemare, Principal Deputy Under Secretary of Defense (Acquisition and Technology), *Acquisition of Information in Digital Format*, 4 June 1996.

version/release 004010 to meet year 2000 compliance requirements; these ICs were approved as federal implementation conventions in September, 1998.

Program Management Reporting

EDI for program management reporting focuses on these contract data requirements placed on large-scale, high-risk, or cost contracts:

- Project cost reporting using the Cost Performance Report (CPR) formats
 1 to 5 or the Cost/Schedule Status Report (C/SSR) format;
- Funds status reporting using the Contract Funds Status Report (CFSR) format;
- Project schedule reporting;
- Contractor Cost Data Reporting (CCDR) using the DD 1921 formats.

The purpose of these data requirements is to provide visibility into work accomplished, funding requirements, and actual costs on DoD contracts. They also provide the management data required by the service headquarters, OSD, and ultimately, Congress.

The objective of the project cost and schedule reports and related funding reports is to provide timely data for use by contractors and their government customers to adequately assess:

- When work is going to be done (the schedule or plan);
- How much it is going to cost to do the contracted work (the budget);
- Who is doing the work (responsibility assignments);
- How much money was spent doing the work (actual costs);
- How much work was completed for the money spent (earned value);
- Technical goals and parameters (technical performance measurement);
- When the work is scheduled to be complete and how much it will cost to complete the work (estimate to complete);
- Status of funding requirements and estimated termination costs should a contract be cancelled.

The project cost and schedule reports highlight problems or potential problems so that proper management action can be taken to reduce the impact of significant cost, schedule, or technical performance variances from the original project plans.

The prime objective of the contractor cost data reports is to collect the actual costs that businesses incur in performing defense contracts. DoD uses this information to estimate future acquisition costs for large-scale development and production contracts for major weapon systems. This includes:

- A breakdown of recurring and non-recurring costs by task using a work breakdown structure or contract line item number;
- A breakdown of functional actual costs and hours such as engineering, manufacturing, and tooling;
- Learning curve analysis;
- Plant-wide overhead details and related statistics.

Why EDI for Program Management Reporting?

The goal of EDI is to provide a standard format and data element dictionary to exchange data in an electronic environment. EDI solves the problem of sharing data between disparate operating systems, applications, and computers using a simple neutral format. In the program management environment, this allows a program office to select commercial off the shelf tools and processes to exchange data in an electronic environment without having to spend scarce program funds on contract unique data format and delivery requirements.

EDI provides the means to:

- Eliminate any manual data entry into one or more software applications for analysis and reporting which dramatically reduces errors, data entry costs, and time delays;
- Improve data consistency because the EDI format and data element dictionary provide a standard set of parameters for all contracts while accommodating contract unique data content;
- Eliminate proprietary software formats, interfaces, and programming effort because the standard format is application neutral;
- Allow all contractors to use a standard format for all their government customers eliminating contract specific data format and data delivery costs;
- Provide program managers with a common set of commercial tools and processes they can rely on and that are transparent to them.

Accomplishments

The objective of the original funding from OSD in 1995 and 1996 was to assist in implementing EDI for program management reporting piloted by the

Navy across all the services. Accomplishments in fiscal year 1995 and 1996 were discussed in summary reports provided to OSD in January, 1997.

Through fiscal years 1997 and 1998, implementation and support efforts for all the services continued using the remaining funding from OSD. The Naval Sea Systems Command functioned as the focal point with support from the DoN Electronic Commerce Program Office. The accomplishments listed here reflect the efforts completed in fiscal years 1997 and 1998 under the direction of the Naval Sea Systems Command.

Products

Federal approved implementation conventions. Working with the joint DoD and federal Logistics Functional Working Group (LFWG), four program management implementation conventions were developed and approved at the federal level. This included the:

- 196 Contractor Cost Data Reporting IC;
- 806 Project Schedule Reporting IC;
- 839C Project Cost Reporting IC for cost performance reports (CPR) and cost/schedule status reports (C/SSR);
- 839F Project Cost Reporting IC for contract funds status reports (CFSR).

The ICs were approved at the federal level to allow all federal agencies the ability to use the program management transaction sets. While the DoD is typically the primary user of program performance and management data such as the cost performance reports, there is selected use within NASA, the Department of Energy (DoE), and other federal agencies.

There were also additional directives in 1997 that has broaden the use of performance based management and reporting within the federal government. Because the use of performance based management has proven to be so successful within the DoD, the Office of Management and Budget (OMB) issued Circular A-11, Part 3, *Planning, Budgeting, and Acquisition of Fixed Assets*. This circular made it a requirement for most government-wide acquisition programs to use performance based management for all government contracts. Performance based management reporting is the focus of the 839 transaction set.

Two sets of the four program management ICs were approved at the federal level. The first set was approved in July, 1997 using ANSI X12 version/release 003050 (196 and the two 839 ICs) and 003060 (806). This first set reflected the working drafts originally prepared by the Navy and updates that resulted as part of the prototype process with selected Air Force, Army, NAVSEA, and NAVAIR program offices.

The second set was approved in September, 1998 using the ANSI X12 version/release 004010. This was done to comply with year 2000 requirements. The underlying X12 standard was updated to increase the date data element from six to eight characters to allow the inclusion of a century reference. It is anticipated that contractors and the DoD will move to the use of the 004010 ICs sometime in the first or second quarter of 1999 as part of the federal government year 2000 compliance initiatives.

Along with the two sets ICs, a series of attachments were developed for each version/release to help contractors, commercial off the shelf (COTS) program management software vendors, and program offices understand how to use the EDI standards and how to map application data to the standards. These attachments included examples, forms cross references, and other cross reference tables to illustrate how the standards correlated to application data, DID requirements, and DD form requirements.

In addition, application map files were created for the 839 implementation conventions to help the commercial off the shelf software vendors write utilities to import and export data using the X12 standard format. The original was produced for version/release 003050 and has been updated for version/release 004010.

The program management ICs can be downloaded from the NIST Federal Secretariat for EDI Internet site. The NIST posting for the version/release 004010 editions includes the examples and appendices.

Migrated the U.S. ANSI X12 transaction sets to international UN/EDIFACT messages. Working with the joint DoD and federal LFWG, the functionality of the 806 Project Schedule Reporting and the 839 Project Cost Reporting transaction sets were migrated to UN/EDIFACT messages. The equivalent UN/EDIFACT messages are the:

- PROTAP Project Tasks Planning message;
- PROCST Project Cost Reporting message.

The PROTAP message completed the standards development process in April, 1998 and is available for use today. The PROCST message is still in the development phase and will be available for use in early 1999.

As part of the migration process, additional functionality was incorporated into the messages based on lessons learned from developing and using the comparable X12 transaction sets. For example, the PROTAP message includes the ability to carry additional resource availability data; identify related external activities, schedules, and files; and describe the application software environment.

The PROCST message includes the ability to exchange technical performance parameters or statistics, identify the currency, describe the application environment, improve on the means to identify time based monetary amounts and quantities, and use code lists to identify country specific reporting notations. The use of code lists allows the PROCST message to be tailored to each country's reporting requirements while providing a common framework to exchange cost performance data. In the case of the U.S. Department of Defense, it allows the ability to use existing reporting attributes such as the type of report, type of program notation, type of contract notation, and other details that are specific to the U.S.

It is anticipated that related U.S. federal implementation conventions for the PROTAP and PROCST messages will be developed in 1999. At present, there are no plans to migrate the 196 Contractor Cost Data Reporting transaction set to the UN/EDIFACT standards; this tends to be a U.S. DoD unique reporting requirement.

The migration process was undertaken as part of the DoD initiative to move the functionality the DoD is using in the ANSI X12 EDI standard syntax to the UN/EDIFACT EDI standard syntax. This move was initiated to keep in lock-step with the changing status of the EDI standards.

The business community using the ANSI X12 standards voted to cease new development work in the X12 syntax in favor of UN/EDIFACT international standards. Because the ANSI X12 standards are generally a U.S. national standard, there is limited use of the standard internationally. Other nations tend to use their own national standards or the UN/EDIFACT standards. To circumvent the use of multiple national standards and to move into a border-free environment, EDI traffic is migrating to the use of UN/EDIFACT standards. The DoD is preparing for the day they need to make the move to the international standards.

The migration of the 806 and 839 transaction sets was also initiated to support the international exchange of program management data and the fact that performance management precepts have been incorporated into business management standards around the world including a U.S. ANSI standard.

The U.S. DoD is one member of the International Performance Management Council (IPMC). The other members include the ministries of defense from Australia, Canada, New Zealand, Sweden, and the United Kingdom. The goal of this council is to provide a common, international framework for performance management and reporting. Typically a defense contractor must use a certified performance management system for their government contracts. With agreements in place with the members of the IPMC, a contractor can use their certified system for all their contracts regardless of the country they are doing business with and without having to certify their

system with each country. This is an important benefit to contractors who do business internationally.

As the use of the EDI standards to exchange program management data expand in the U.S., it is only natural that the practice will gradually be accepted in the international community. The work undertaken for the U.S. DoD to migrate the program management transaction sets to UN/EDIFACT messages can be used to the benefit of the international performance management community.

EDI for Program Management Reporting Getting Started Handbook.

The original handbook was completed in July, 1996. It was subsequently updated in September, 1997 and September, 1998 to reflect the current environment. The handbook was designed to help a program office implement EDI for program management reporting using the lessons learned from the early prototype and production projects. It covers:

- Basic information about EDI and how it works;
- Methods of data transport (formal and informal);
- How EDI fits in with other electronic commerce tools including a contractor integrated technical information systems (CITIS) environment:
- Implementation steps and tips;
- Sample plan of action and milestones (PO&AM) for implementing EDI for program management reporting.

Program Management EDI Internet site. Working in conjunction with the Office of the Under Secretary of Defense for Acquisition and Technology, Performance Management, the existing performance management web site includes information about the use of EDI for program management reporting. The information has been updated on a regular basis over the years. The content was last updated in September, 1998 and includes:

- Basic information about EDI for program management reporting;
- Where to get a copy of the applicable implementation conventions;
- Means to download a copy of the getting started handbook;
- Means to download a copy of the 004010 application map for the 839 implementation conventions;
- Answers to frequently asked questions;
- Links to other related electronic commerce and EDI Internet sites.

Support and Other Activities

Moved from prototype mode into production mode. The prototype phase provided the groundwork needed to move forward. The lessons learned from the first implementations made it much easier for the next set of program offices to get on board. Fiscal year 1997 began the move from the prototype stage to a production environment. What took months before was now only taking weeks or days. As more program offices and contractors became aware of the standards, EDI became more common place in the contract data requirements. Today, all new contracts typically cite the use of the X12 standards to exchange cost performance data (CPR or C/SSR) and contractor cost data (CCDR).

In instances where the contractor's corporate EDI support personnel became involved, the process to implement EDI moved even faster. In selected cases such as with the Naval Sea Systems Command, contractors have used the Single Process Initiative (SPI) to change the cost performance data delivery requirements for a block of existing contracts from a variety of methods to EDI.

COTS software. Worked with the major program management software vendors on a regular basis to ensure their X12 import and export utilities met the criteria of the federal implementation conventions. Also worked with the vendors during the update process for the 004010 implementation conventions to ensure they were aware of the coming changes. These vendors played a critical part in expanding the use of the 839 and 196 transaction sets. They are the reason we were successful with so many of the 839 implementations. One vendor also offers add-on utilities for other program management software to extract data in the 839 format. This made it much easier for program offices and contractors to use commercial off the shelf utilities to import and export data using the X12 standards regardless of the method of data transport. These vendors made it common place and easy to use the X12 standards to exchange cost performance data.

Program office and contractor outreach. Efforts continued to provide training to program offices across the services and to present the latest information to industry association meetings and conferences. The goal was to provide information the program offices needed to broaden the use of EDI for program management reporting and ensure contractors were aware of the latest developments.

General support. Provided a source of information to help program offices and contractors get started, address concerns and issues, and answer questions. Issues and questions ranged from basic EDI education to which COTS program management software offered utilities to import and export data using the X12 format. Sometimes it was also a matter of getting the right people talking to each other such as having a corporate EDI support

person within a company contact the project person responsible for delivering the cost performance data to their government customer.

Gateway services. Worked with the Navy Inventory Control Point (ICP) in Philadelphia, Pennsylvania and the Defense Logistics Agency (DLA) Automatic Addressing System Center (DAASC) to provide central EDI gateway, mapping, and delivery services for those program offices who wanted to use the formal method of data transport for the 839 and 196 transaction sets. This formal method includes the use of EDI translation software and Value Added Network (VAN) services.

While some volume of program management traffic moved through the Navy and DAASC gateways, there is an increasing volume of traffic that is using informal methods of data transport. This includes using direct connects such as T1 links between contractors and their customer, e-mail, the Internet, or Internet/Intranet sites and similar CITIS types of environments where the X12 standard is used as the means to exchange cost performance data (CPR) and contractor cost data (CCDR). In these instances, EDI translation software is typically not used. The application systems exchange an X12 formatted file that conforms to the applicable implementation convention and includes all the data between the ST and SE (transaction set start and end) data segments.

Remaining Issues and Concerns

Reviewing the accomplishments over the last four years, the things that needed to be done to enable the use of EDI for program management reporting are complete. This included:

- Federal and DoD policy statements that endorse and stress the use of standards as well as the migration to a digital program environment;
- Approved EDI standards that are year 2000 compliant;
- Federal approved implementation conventions that are year 2000 compliant;
- Successful prototype and production implementations of EDI program management reporting across all the services;
- Established formal and informal methods of data transport to fit a variety of program management requirements at low or no cost to a program office;
- Training, general support, central source of information, and help getting started at no cost to a program office;
- COTS tools that make it easy to exchange X12 data in a variety of environments at low or no cost to a program office.

While the foundation has been laid for program offices and contractors to use and benefit from a standards based electronic program management environment, there are remaining issues and concerns that limit the use of the EDI standards. These are described below.

Program office focus and incentives. As it should be, the primary objective for a program office is to complete their objective on time and within budget. How a program office exchanges data with their contractor(s) is not their first priority.

While there has been high policy level endorsements within DoD and the federal government to use electronic based methods and to use established standards, this has had limited impact on what a program office elects to do or use to exchange all types of data with their contractor(s).

Each government program office decides what they believe is best for their program regardless of any high level policy statements at the federal or DoD level. Many times this is based on personal experience, the recommendation from a support contractor, or the contractor involved. In many cases the program office selects the simplest approach; they dictate what software the contractor will use or the contractor sets up an on-line system for the government customer to view the data.

There is little or no incentive for a government program manager to take advantage of established standards; in many cases they are unaware that standards exist or that using standards can save them money by eliminating contract unique requirements. Because the contractor is compensated for program unique solutions, the contractor is more than willing to provide the data in the format dictated by the government program office.

Education. While it is now fairly standard in contract requirements to state the use of the X12 standards, there is still confusion on the part of program offices and contractors on what EDI is and is not.

Some program offices are of the opinion that if they exchange any type of file using a floppy disk or via e-mail, they are using EDI. There are others who think that all they need to do is set up an Internet or CITIS type of environment and all their data exchange problems are solved. And, there are some who still think that EDI is too hard and too costly to do because the contractor insists on negotiating EDI requirements out of the contract or they get confused over the underlying standard and what they think are the available methods of data transport.

Many program offices also get confused over on-line data access versus data delivery. On-line data access can take many forms such as a CITIS type of environment; typically the environment is set up by the contractor to allow

the government customer a means to view contract data on-line. Because it is a view-only mode, the data cannot be manipulated or downloaded into another application. Depending on the contract, this may be sufficient for the program office. For program offices that want to go beyond viewing data on-line, EDI provides a standard means to collect or extract the data for use into one or more other application systems. This allows the program office the ability to do further analysis on a variety of data.

The value of using application neutral standards to create a common and low cost foundation for an integrated digital environment are not apparent. Use of the standards allows a program office to tailor the content of the data to their contract without having to worry about the changing methods and means to view, collect, and exchange data. Technology and software changes too quickly to dictate methods or application systems; open standards based approaches allows all parties to take advantage of new technology and methods without having to change or dictate the underlying data sources.

This is a completely different approach for most program offices. Typically they have relied on the use of expensive contract unique proprietary solutions that may or may not happen to use some sort of electronic means to exchange the data.

Commercial off the shelf software. One of the primary reasons the 839 (cost performance reporting) and 196 (contractor cost data reporting) transaction set implementations were a success and continue to be used is because a variety of commercial off the shelf software vendors support the import and export of the data using the X12 standards. For application systems that produce cost performance reports, the ability to at least export data using the 839 transaction set is a common utility. The primary application software used by government program offices can import and export data using the 839 transaction set.

Commercial off the shelf software can also limit and in some cases stop the use of the X12 standards. This was the case with the 806, Project Schedule Reporting transaction set. There were three primary reasons the 806 transaction set was never fully implemented to exchange project schedule data. They are described below.

1. The primary COTS scheduling application used by the government program offices truncates data if their native application format to import or export data is not used. This vendor refused to support any type of export that included all schedule data regardless if it followed the X12 standard or not. Third party vendors that create add-ons to this piece of software were also unsuccessful in creating an export file that did not

truncate data.

- 2. Difficulties with data normalization inherent in scheduling software. When the software utilities are used to do a forward and backward pass to calculate durations and free float in a schedule, there is the potential that the activity start and finish dates will be different depending on the software used. This requires extra effort to resolve the differences when data is shared between different scheduling application systems. The problem is compounded if resources are applied to the activities and resource schedule dates are used instead of or with the activity start and finish dates.
- 3. Lack of a standard DID for the schedule content that would have made it easier to determine the core data requirements. Each application can include user defined fields or application specific fields that have no correlation to data in another application system.

As a result, the government program offices have taken the simplest approach to exchanging schedule data. They dictate what software the contractor will use and exchange data in the native format for the given application system.

Glossary

196 Transaction set number for the Contractor Cost Data Reports. Used to

exchange CCDR data.

Transaction set number for Project Schedule Reporting. Used to exchange

network scheduling, resources, task lists, milestones, bar charts, or line of

balance type of data.

Transaction set number for Project Cost Reporting. Used to exchange

Cost Performance Report (CPR), Cost/Schedule Status Report (C/SSR), or

Contract Funds Status Report (CFSR) data.

AIA Aerospace Industries Association.

ANSI American National Standards Institute.

ANSI Standard A document published by ANSI that has been approved through the

consensus process of public announcement and review.

ASC X12 The ANSI Accredited Standards Committee X12. It comprises industry

members who create EDI standards for submission to ANSI for subsequent

approval and dissemination.

CCDR Contractor Cost Data Reports, the DD 1921 series of four formats, for

actual cost tracking, learning curve analysis, lot production details, and

plant-wide statistics.

CFSR Contract Funds Status Report. For reporting contract funding details,

usually quarterly.

CITIS Contractor Integrated Technical Information Services. A means to provide

on-line access to program data to authorized parties.

COTS Commercial off the shelf.

CPR Contract Performance Report. Series of five formats for monthly

performance reporting.

C/SSR Cost/Schedule Status Report. Series of two formats for simplified monthly

performance reporting, generally for smaller contracts.

DAASC DLA Automatic Addressing System Center.

Data Elements Basic units of information to describe data in an EDI environment. Data

> elements are like fields in a record. A segment defines the order of the fields (data elements) in a record (segment). Data elements represent a singular fact. It may be a single character code or qualifier, literal

descriptions, dates, or numeric values. Also see Segment.

DID Data Item Description.

DLA Defense Logistics Agency.

DoD Department of Defense.

DoN Department of the Navy.

EC Electronic commerce. Generally, any digital means used to exchange data.

EDI Electronic data interchange. The computer application to computer

> application exchange of machine readable and processable business information in a public standard format such as ANSI ASC X12 or

UN/EDIFACT via any electronic messaging service.

Data extracted from an application in a flat text file that follows EDI **EDI Ready File**

> syntax and format rules but lacks the outer envelope data that EDI translation software provides. It can be used to interface with EDI translation software in a formal EDI environment or sent as is in an

informal EDI environment.

EDI Server Computer system used as a central processor to handle EDI traffic and

> related processes and procedures. Includes EDI translation software, backup utilities, communication and file transport capabilities, application

interface mapping, electronic copy distribution, and so forth.

EDI Translation

Software used to interface with application systems and EDI standards. Software Provides compliance checking, data mapping, communication utilities,

EDI management reports, trading partner details, and more.

Two or more connected or shared Internets. **Extranet**

Formal EDI An EDI environment that uses the traditional method of data exchange

Environment using EDI translation software and value added networks.

IDE Integrated Digital Environment.

Implementation Defines how the ASC X12 standards are used by a specific industry group

Conventions (ICs) such as the Department of Defense.

Informal EDI An EDI environment that uses open systems, Internet based **Environment**

communication protocols and methods of data exchange.

Internet The name for a world-wide, TCP/IP based networked computing

community with millions of users world wide that links government,

business, research, industry, and education together.

Intranet An internal Internet.

IPMI ESG Integrated Program Management Initiative Executive Steering Group.

LFWG Logistics Functional Working Group.

Mapping The process of identifying how EDI standards data elements relate to

application system data elements.

Message A document that unambiguously defines, in standard UN/EDIFACT

> syntax, information about a specific business use in an EDI environment. Consists of a six letter code, title, purpose and scope, and a list of

segments that prescribe the order and other details needed to exchange

data electronically.

NAVAIR Naval Air Systems Command.

NAVSEA Naval Sea Systems Command.

National Defense Industrial Association. **NDIA**

NIST National Institute of Standards and Technology. They maintain a

repository of all federal approved implementation conventions.

NSIA National Security Industry Association.

OSD Office of the Secretary of Defense.

OSD PA&E Office of the Secretary of Defense, Program Analysis and Evaluation.

POA&M Plan of Action and Milestones.

PROCST UN/EDIFACT message for Project Cost Reporting. Used to exchange

> Cost Performance Report (CPR), Cost/Schedule Status Report (C/SSR), or Contract Funds Status Report (CFSR) data. Equivalent to the 839 X12

transaction set.

PROTAP UN/EDIFACT message for Project Tasks Planning. Used to exchange

network scheduling, resources, task lists, milestones, bar charts, or line of

balance type of data. Equivalent to the 806 X12 transaction set.

Segments Define the structure of the data elements in the EDI standards. Segments

are like records in a database. They describe the order of the data and the fields (data elements) that make up the record (segment). Segments consist of an identifier, title, purpose, and list of data elements along with any syntax or semantic notes on how to use the data elements. Also see

Data Elements.

SPI Single Process Initiative.

ST/SE Transaction set header and trailer segments that are used to identify a

specific transaction set. Part of the outer envelope that surrounds an EDI message. These segments surround the core of the message—this core is the business data that is exchanged between application systems in the

standard EDI format.

Transaction Set A document that unambiguously defines, in standard X12 syntax,

information about a specific business use in an EDI environment. Consists of a number, title, purpose and scope, and a list of segments that prescribe

the order and other details needed to exchange data electronically.

UN/EDIFACT United Nations Electronic Data Interchange for Administration,

Commerce, and Transport. International standard for EDI equivalent to

the U.S. ANSI ASC X12 standards.

VAN Value-added network. VANs are private third-party networks that provide

electronic mailboxes, store and forward capabilities, and more, to move EDI messages from one trading partner to another in a secure environment.

Version/Release Identifies the publication of the standard being used for the generation or

the interpretation of data in an EDI standard format.